CELL CYCLE & CELL DIVISION

Q Why does a cell divides?

A (i) To maintain a high surface area : volume ratio which results in increased exposure to the environment for increased transport of substance

(ii) To maintain a high nucleo : cytoplasmic ratio.

→ Due to this the nucleus will have a better control over the cytoplasm

(iii) DNA duplication / replication also initiates cell division.

(iv) Due to the presence of mitogens (agents inducing mitosis) eg In plants — cytokinin. In animals — Platelet Derived Growth Factor.